

Figure 14<sup>a</sup> shows a notation for describing pixel and sub-pixel locations specific to the invention;

Figure 14b shows interpolation of a half resolution sub-pixels according to the invention;

- 5 Figure 14c shows interpolation of a half resolution sub-pixels according to the invention;

Figure 15 shows possible choices of diagonal interpolation for sub-pixels;

Figure 16 shows the half resolution sub-pixel values required to calculate other half resolution sub-pixel values;

- 10 Figure 17a shows the half resolution sub-pixel values that must be calculated in order to interpolate values for quarter resolution sub-pixels in an image block using the interpolation method of TML5;

Figure 17b shows the half resolution sub-pixel values that must be calculated in order to interpolate values for quarter resolution sub-pixels in

- 15 an image block using the interpolation method according to the invention;

Figures 18a shows the numbers of half resolution sub-pixels that must be calculated in order to obtain values for quarter resolution sub-pixels within an image block using the sub-pixel value interpolation method according to TML5;

- 20 Figure 18b shows the numbers of half resolution sub-pixels that must be calculated in order to obtain values for quarter resolution sub-pixels within an image block using the sub-pixel value interpolation method according to the invention;

- 25 Figure 19 shows a numbering scheme for each of the 15 sub-pixel positions;

Figure 20 shows nomenclature used to describe pixels, half resolution sub-pixels, quarter resolution sub-pixels and eighth resolution sub-pixels

Figure 21a shows the diagonal direction to be used in the interpolation of each eighth resolution sub-pixel in an embodiment of the invention;